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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RAGHBIR S. BHULLAR,
CHRISTOPHER D. WILSEY, JOHN T. AUSTERA, and
WOLFGANG O.L. REISER,
APPELLANTS

Appeal 2008-2170
Application 09/866,030¹
Technology Center 1700

Decided: June 02, 2008

Before ADRIENE LEPIANE HANLON, PETER F. KRATZ, and
MARK NAGUMO, *Administrative Patent Judges*.

NAGUMO, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ Application 09/866,030 (“030 Application”), filed 25 May 2001, titled *Biosensor*. The real party in interest is listed as Roche Diagnostics Operations, Inc. ([Third] Amended Appeal Brief of Bhullar et al., filed 18 December 2006) (“Br.”), at 1.)

A. Introduction

Raghbir S. Bhullar, Christopher D. Wilsey, John T. Austera, and Wolfgang O.L. Reiser (“Bhullar”) appeal under 35 U.S.C. § 134(a) from the final rejection of claims 6, 10-15, and 21-26, which are all of the pending claims in the 030 Application. We have jurisdiction under 35 U.S.C. § 6. We REVERSE.

The subject matter on appeal relates to a biosensor generally in the form of a sample chamber having a capillary channel with an inlet positioned between two opposed outlets. Sensing is via electrode arrays placed in the channel as specified by the claims.

The Examiner has maintained the following rejections²:

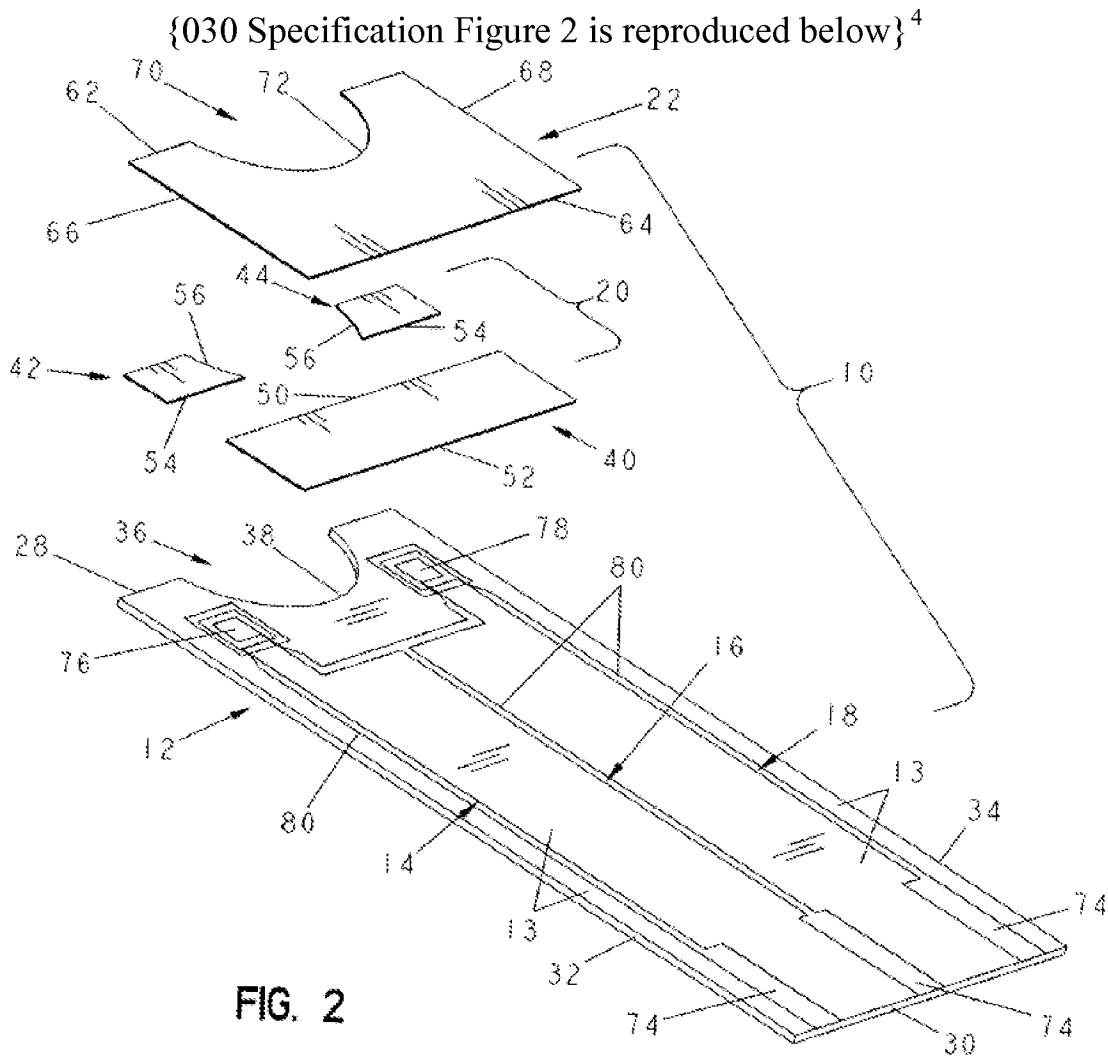
Claims 6, 10-15, and 21-26 stand rejected as indefinite under 35 U.S.C. § 112(2);

Claims 6, 10-15, and 21-26 stand rejected under 35 U.S.C. § 102(b) in view of Nankai³.

Claims 24, 25, and 26 are representative and are reproduced below. They are readily comprehended by reference to the particular embodiment explained in the 030 Specification at pages 3-6 and illustrated in Figures 2 and 1A. (Although the Examiner deals with claim 26 only cursorily, we include it here because it is more specific and therefore somewhat easier to understand than the other claims.)

² Examiner’s Answer mailed 18 June 2007 (“Ans.”)

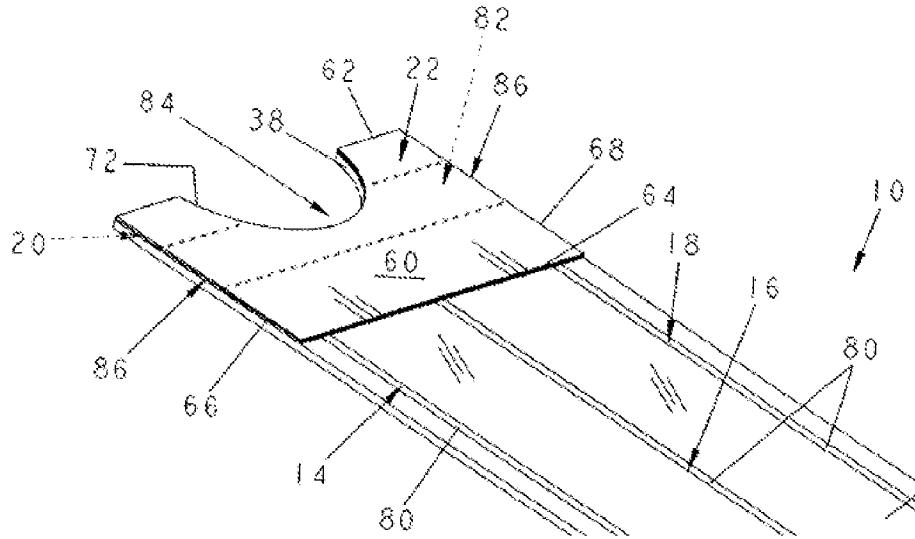
³ Shiro Nankai *et al.*, *Biosensor and a Process for Preparation Thereof*, U.S. Patent 5,120,420 (9 June 1992).



{Application 030 Figure 2 is said to show a biosensor.}

⁴ The text in curly braces preceding and following the Figures is provided to ensure compliance with section 508 of the U.S. Rehabilitation Act for publication of this Decision on the USPTO website pursuant to the Freedom of Information Act. It is not part of the Decision.

{030 Specification Figure 1A is reproduced in part below:}



{030 Application Figure 1A is said to show a biosensor.}

Claim 24:

A biosensor [10] comprising
a support [12] having first [28] and second ends [30],
electrodes [76, 78] positioned on the support, the electrodes
cooperating with one another to define electrode
arrays [76, 78] situated adjacent to the first end [28],
a spacer [20] having individual members [40, 42, 44], and
a cover [22] cooperating with the support to define a
capillary channel [82] extending between the individual
members [40, 42, 44],
the channel [82] having opposing outlets [86] and a
concave inlet [84] extending from the first end [28] of the
support and being positioned between the opposing
outlets [86] of the channel,
each electrode array [76, 78] being positioned in the
channel [82] adjacent to one of the opposing outlets [86].

(Claims App., Br. 33-34; paragraphing and square bracketed labels to elements identified in Figures 1A and 2 added for purposes of illustration)

only; we imply no limitation of the scope of the claimed subject matter.)

Claim 25

A biosensor [10] comprising

- a support [12] having a first edge [28],
- first [76] and second electrode sets [78] positioned on the support [12] spaced-apart from one another,
- a spacer [20] having individual members [40, 42, 44], and
- a cover [22] having a second edge [72],
- the cover extending across the first and second electrode sets [76, 78],
- the cover [22] cooperating with the support [12] to define a generally linear capillary channel [82] extending between the individual members [40, 42, 44],
- the channel [82] having
 - opposing first [86] and second outlets [86] and
 - an inlet [84] aligned with the first edge [28] of the support [12] and the second edge [72] of the cover [22] between the outlets [86] of the channel [82], and between the first and second electrode sets [86].

(Claims App., Br. 34; paragraphing and square bracketed labels to elements identified in Figures 1A and 2 added for purposes of illustration only: we imply no limitation of the scope of the claimed subject matter.)

Claim 26

A biosensor [10] comprising

- a support [12] having first [28] and second ends [30],

electrodes [76, 78] positioned on the support, the electrodes cooperating with one another to define electrode arrays [76, 78] situated adjacent to the first end [28],
a spacer [20] having individual first, second, and third members [40, 42, 44], and
a cover [22] cooperating with support to define a capillary channel [82], the channel extending between the three members [40, 42, 44] and having an inlet [84] positioned between the second and third members adjacent to the first end [28] of the support [12] and
spaced-apart first [86] and second opposite outlets,
the first opposite outlet [86] being positioned between the first [40] and second [42] members and
the second opposite outlet [86] being positioned between the first [40] and third [44] members,
each electrode array [76, 78] being positioned in the channel [82] adjacent to one of the opposite outlets [86].

(Claims App., Br. 34-35; paragraphing and square bracketed labels to elements identified in Figures 1A and 2 added for purposes of illustration only; we imply no limitation of the scope of the claimed subject matter.)

B. Discussion

Indefiniteness

During prosecution, “the PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant’s specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). Claims are definite if they “set out and circumscribe a particular area with a

reasonable degree of precision and particularity. It is here where the definiteness of the language employed must be analyzed—not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art.” *In re Moore*, 439 F.2d 1232, 1235 (CCPA 1971). However, “breadth [of a claim] is not to be equated with indefiniteness.” *In re Miller*, 441 F.2d 689, 693 (CCPA 1971).

According to the Examiner, seven specific issues render claim 24 indefinite and eight specific issues render claim 25 indefinite. (Ans. 3-6.) Claim 26 is said to suffer from the same problems as claims 24 and 25, and no specific discussion is provided. (*Id.* at 6.) First, the Examiner urges that the recitations of a support “having first and second ends (claim 24; Ans. 3), or a support having a “first edge” (claim 25; Ans. 5), or a cover having a second edge (claim 25; Ans. 5), are “unclear.” This argument is devoid of merit. The terms “first” and “second” are here no more than labels that distinguish those ends or edges from other ends or edges. The examiner further deems it “unclear to define two pairs of electrodes and call it an array” (claim 24; Ans. 3), or to specify that electrode sets are “positioned on the support spaced apart from one another” (claim 25; Ans. 5). These assertions are not supported by any analysis of the disclosure or of the plain language. Moreover, the Examiner does not direct our attention to any ambiguity (e.g., conflicting disclosure in the specification) of meaning arising from this broad language. We conclude these bases of rejection are also meritless.

The Examiner asserts that the term “a spacer having individual members” is unclear, and notes that claim 2 recites spacers that cooperate

with each other to define a capillary channel. (Claims 24 & 25; Ans. 3 & 5, respectively.) The Examiner also asserts that the recitation of a “cover cooperating with the support to define a [generally linear] capillary channel . . .” neglects to recite the role of the spacer. (Claims 24 [and 25]; Ans. 4, 5.) Again, the Examiner does not support these assertions with any probative analysis pointing out an ambiguity in the claimed subject matter. The Examiner also appears to have overlooked the limitation, “a cover cooperating with the support to define [a generally linear] capillary channel extending between the individual members” present in claims 24 [and 25], respectively. This reference back to the “individual members” effectively recites their role of defining, together with the cover and the support, a capillary channel. Bhullar’s argument (Br. 12, 19-20; 28) that the term “individual members” indicates that the spacers have plural parts is well-supported by the plain language of the claims and the disclosure in the specification. The Examiner’s position is unsupported by credible evidence and, we conclude, is without merit.

The Examiner asserts indefiniteness of claims 24 and 25 (Ans. 4, 5-6) due to language relating to the term “channel” that is no longer in the claims—i.e., “ends”—which evidently was replaced by the term “outlets” (Amendment filed 26 August 2005, at 3). The Examiner’s rejections are therefore baseless.⁵ Finally, the Examiner urges that the concluding phrase

⁵ The Answer appears to copy the text of the Final Rejection (mailed 18 November 2005). This practice is commendable when the claims and evidence have not changed. When, as here, however, the Final Rejection itself appears to refer to claim language that was then no longer present in the claims, the repetition of the erroneous language in the Examiner’s

of claim 25, “between the first and second electrode sets” is indefinite because it is not clear what is referred to. Simple inspection of the claim indicates that what is referred to is the position of the inlet.

At best, the Examiner appears to have confused breadth with indefiniteness. The rejections for indefiniteness are REVERSED.

We now turn to consider whether the appealed claims are so broad that they read on biosensors described by Nankai.

Nankai

"A claim is anticipated if each and every limitation is found either expressly or inherently in a single prior art reference." *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368, 1374 (Fed. Cir. 2001).

The dependent claims stand or fall with the corresponding independent claims. (Br. 32.) Independent claims 24, 25, and 26 each require, *inter alia*, a spacer having plural members and an inlet to the capillary channel that is between the outlets of the capillary channel.

In the present case, as Bhullar points out (Br. 28), Nankai Figures 4-6, on which the Examiner relied in the final rejection and in the statement of the rejection in the Answer, does not describe a biosensor having “a spacer having individual members.” Moreover, no embodiment identified by the Examiner has an inlet between outlets, as required by the claims. Nor does any embodiment identified by the Examiner, including Figures 10 and 12⁶

Answer greatly reduces the Board’s confidence in the quality of the findings and conclusions expressed in the Answer.

⁶ Figures 10 and 12 appear to have been cited for the first time in the Examiner’s Answer, in response to Bhullar’s arguments. (Ans. 9.) We also

have “opposing outlets”. These defects are fatal to the rejection for anticipation.

The Examiner’s argument that “the claims are so unclearly written as seen by all the 112 rejections that the claims had to be interpreted as the Examiner has interpreted them” (Ans. 9-10) is legally erroneous. As the predecessor to our reviewing court wrote, “[i]f no reasonably definite meaning can be ascribed to certain terms in the claim, the subject matter does not become obvious — the claim becomes indefinite.” *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970); *see also, In re Steele*, 305 F.2d 859, 862–63 (CCPA 1962) (admonishing the PTO for relying on speculative assumptions as to the meaning of claims as the basis for an obviousness rejection.) In any event and for the reasons stated in our discussion above with regard to the Examiner’s § 112 rejections, we have not found the appealed claims indefinite for the reasons presented by the Examiner.

The rejection of claims 6, 10-15, and 21-26 under § 102(b) in view of Nankai is REVERSED.

C. Summary

In view of the record and the foregoing considerations, it is:

ORDERED that the rejection of claims 6, 10-15, and 21-26 under 35 U.S.C. § 112(2) is REVERSED;

note that the Examiner, in the next sentence, incorrectly asserts that Bhullar raised an argument for the first time on appeal. As Bhullar correctly points out (Reply Br. at 26), this argument was raised in its response filed 26 August 2005, at 20-22.

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FURTHER ORDERED that the rejection of claims 6, 10-15, and 21-26 under 35 U.S.C. § 102(b) in view of Nankai is REVERSED; and

FURTHER ORDERED that no time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

REVERSED

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